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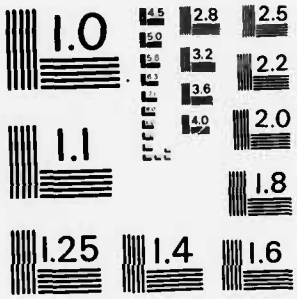
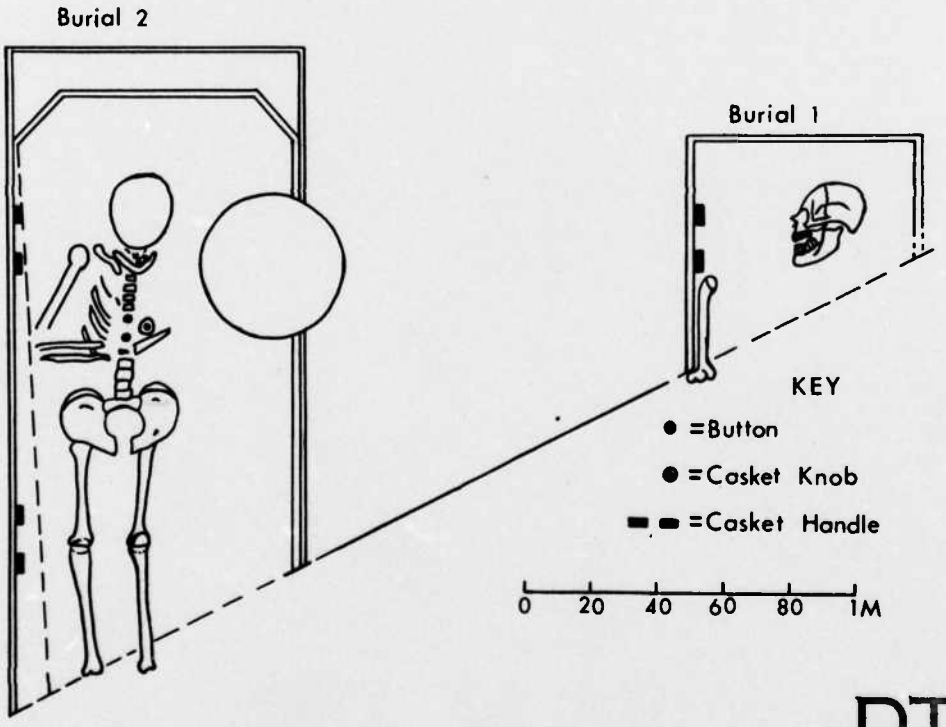


MISCELLANEOUS BURIAL RECOVERY IN EASTERN WASHINGTON, 1981

by

Priscilla Wegars
Roderick Sprague
and
Thomas M. J. Mulinski



UNIVERSITY OF IDAHO ANTHROPOLOGICAL RESEARCH MANUSCRIPT SERIES, NO. 76

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. AD-A132 239	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Miscellaneous Burial Recovery in Eastern Washington, 1981		5. TYPE OF REPORT & PERIOD COVERED Final Report
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Priscilla Wegars, Roderick Sprague, Thomas M.J. Mulinski		8. CONTRACT OR GRANT NUMBER(s) DACW68-81-A-1315 DACW68-82-A-0112
9. PERFORMING ORGANIZATION NAME AND ADDRESS Laboratory of Anthropology University of Idaho Moscow, Idaho 83843		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Corps of Engineers, Walla Walla District Bldg 602, City-County Airport Walla Walla, Washington 99362		12. REPORT DATE 1983
		13. NUMBER OF PAGES 44
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

Approved for public release; distribution unlimited

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

burial recovery
prehistoric
canoe burial
historic

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Report of findings on three separate burial recovery projects taking place in 1981. Two involved aboriginal burials while the third was two historic burials excavated near Richland, Washington.

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Laboratory of Anthropology

University of Idaho

1983

ABSTRACT

In 1981 the Corps of Engineers, Walla Walla District contracted with the Laboratory of Anthropology, University of Idaho for three different burial relocation projects. Those three project reports are combined here for convenience and economy.

On 6 and 7 October 1981, search trenching, using a backhoe, was carried out on Rice Bar, 45-GA-18, Little Goose Project. The operation's objective was the recovery of further burials in that known aboriginal cemetery in advance of their eventual erosion into the Snake River, however no additional burials were located. The skeletal and cultural data for previously recovered burials is summarized.

In early September, 1981, earthmoving work began prior to the construction of the Lyons Ferry Fish Hatchery on the site of the Joso Bridge Construction Camp, 45-FR-51. Salvage excavations in the Fall of 1980 had examined a large number of features dating from 1913-1914, associated with the construction camp, and others dating from 1909-ca.1939, associated with Perry Station, a nearby section house belonging to the Northern Pacific Railroad. During the monitoring of the earthmoving activity a large number of artifacts were collected, many of which were types unrepresented in the 1980 assemblage. Several small dump features were also recorded, one of which appears to be a portion of a feature which was previously partially excavated. In addition, a burial was recovered from a sand dune near the northeast corner of a fenced-off area protecting prehistoric house pits. The individual had been wrapped in a hide and placed in a broken canoe.

In early July 1981, two historic burials were excavated near Richland, Washington, following their disturbance by earthmoving equipment during the course of construction work on Yakima Bridge I-82. Investigative work by a local avocational archaeologist provided not only the names of the people buried, but also their ages at death and certain physical characteristics. These facts were independently confirmed by the physical anthropologist who examined the remains, thus reassuring the descendants that their long-lost family graves had finally been located. Should no family members have come forward, artifact analysis of the casket hardware, clothing, and hair ornaments would, in any case, have enabled the burials to be dated to the early part of the twentieth century, from which inferences could be made regarding burial customs which may have been practiced at that time.

ACKNOWLEDGEMENTS

Rice Bar

We would like to acknowledge, with appreciation, the assistance of a number of individuals both during and after the Rice Bar search trenching.

We are especially grateful for the cooperation and expertise of Tom Cook, operator of the backhoe. LeRoy V. Allen, Archaeological Coordinator, Walla Walla District Corps of Engineers and his Co-op Trainee Archaeologist, John Leier, provided help and support in the field, as did informant Delbert Taylor.

Cathy Lubben, Krista Haley, Vicki Kottke, and Christen Fuhrman of the Laboratory of Anthropology, University of Idaho, provided office support services, for which we thank them. Michael A. Pfeiffer kindly assisted with lithic identification and the illustrations are by Ken Ketterer.

Lyons Ferry

The monitoring and burial recovery project was aided by numerous people, whose help was greatly appreciated. In the field, LeRoy V. Allen and John Leier provided support for the monitoring activities. Bob Ross, Construction Representative, USACE and Dave Opbroek, Project Engineer, USACE, were extremely cooperative; as were Chuck Kelch, the prime contractor; his representative, Jack Stenstrom; and Einar Frimodt, subcontractor for grading. Assisting with monitoring and excavation of features were Michael A. Pfeiffer, Jon Horn, and Keith Landreth; all graduate students in the Department of Sociology/Anthropology. Keith, along with his fellow students Mary Condon and Shannon O'Dell, helped with fieldwalking before actual monitoring commenced.

In the lab, artifact cleaning and cataloging was done by Jon Horn and Keith Landreth and by undergraduate volunteer Nancy Boggs, to whom we are particularly grateful. Shirley R. Medsker, Associate Professor, School of Home Economics and James B. Johnson, Associate Professor, Department of Entomology, kindly took time from their already busy schedules to assist us with the identification of the cloth and beetle specimens, respectively.

Office and laboratory support was cheerfully provided by Cathy Lubben and Chris Fuhrman. Illustrations are by Heidi Mead (Fig. 5) and by David Petersen (Fig. 6).

Bremmer Burial

We are especially grateful to several Bremmer family descendants for aiding us with our background research. Mrs. Mary Rasmussen is particularly thanked for furnishing us with a copy of the family portrait and for

patiently answering our many questions. Thanks are also due to Mrs. Mary Bremmer Ketchum, Mrs. Hilda Bremmer McBain, and Mrs. Martha Nelson for providing us with additional information.

The contractor for the I-82 bridge construction, Peter Kewitt and Sons, Vancouver, was most cooperative and helpful, as were Harvey S. (Pete) Rice of Eastern Washington University and Bob Aye, Project Engineer for the Washington State Department of Transportation.

Support both in and out of the field was provided by LeRoy V. Allen, Archaeological Coordinator for the Walla Walla District Corps of Engineers and by Nick Paglieri, past president of the Mid-Columbia Archaeological Society; it was through Nick's initiative that the Bremmer family members were located.

Several people helped with our research into the grave goods and the coffin hardware for which we are most appreciative. They are Miss Erma Jean Jackle, School of Home Ecomonics, Stout State College, Menomonie, Wisconsin; Joseph E. Randolph, Archaeologist, Bureau of Land Management, Spokane, Washington; M. R. Harwick, Manager, Malcom's Brower-Wann Memorial Chapel, Lewiston, Idaho; Howard C. Raether, Executive Director, National Funeral Directors Association, Milwaukee, Wisconsin; and George W. Lemke, Executive Director, Casket Manufacturers Association of America, Evanston, Illinois.

Additional laboratory and office support was provided by Cathy Lubben, Vicki Kottke, and Chris Fuhrman. The illustrations are by Heidi Mead with the exception of Figs. 9 and 10 which are by Ken Ketterer.

This final report was guided through production by Catherine Lubben with help from Elizabeth Smith, Melissa Lee, and Sharon Lubben.

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I. INTRODUCTION

The three separate burial projects and the associated monitoring work at Lyons Ferry have a common thread running through them that is more than just the fact that the same agency, academic institution, and personnel all accomplished them in the same calendar year. This commonality is the obvious concern of the Walla Walla District, in the person of LeRoy Allen, for the preservation of cultural resources and the proper treatment of human skeletal remains without regard to race or antiquity.

Because letter reports tend to be lost in the flood of cultural resource management literature and because these three projects have something to add to our knowledge of burial practices in general, it was considered proper and desirable to combine them in one larger report. In these times of reduced budgets, this combination of reports also serves to economize our precious resources.

II. SEARCH FOR ANCESTRAL BURIALS RICE BAR, 45-GA-18, LITTLE GOOSE PROJECT

Background

Several times in the past the Laboratory of Anthropology, University of Idaho, has been called upon to retrieve or receive from others, skeletal material discovered eroding out of Rice Bar, 45-GA-18. The site is situated in the Little Goose Project, across the Snake River and upstream from Penawawa, Washington (Fig. 1).

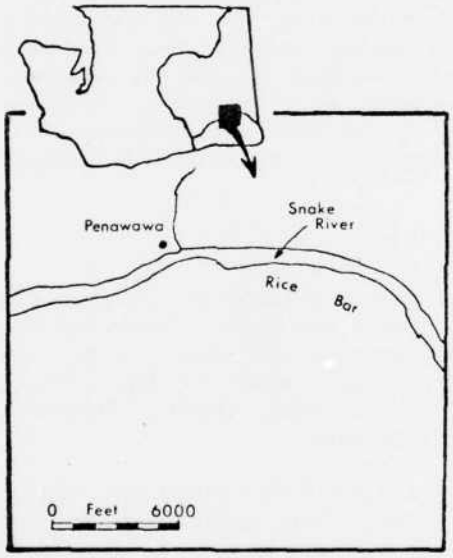


Fig. 1. Location of Rice Bar, 45-GA-18, Little Goose Project.

On 18 December 1980 in the company of Christine McGlinchy, anthropology student at the University of Idaho and LeRoy V. Allen, Archaeological Coordinator, Walla Walla District, Corps of Engineers; Roderick Sprague inspected the site and recovered several pieces of human bone. These, plus material recovered on two previous inspections by Allen, were analyzed by Thomas M. J. Mulinski.

Remains recovered on 28 April by the Garfield County Sheriff's office were delivered to the Laboratory of Anthropology by Allen on 5 May 1981. The site was being monitored by Delbert Taylor who runs cattle in the area and who is also the father of Bill Taylor, a Garfield County Deputy Sheriff. On 6 May 1981, Sprague and Mulinski removed four burials with help from Allen and his Co-op Trainee Archaeologist, John Leier.

On the basis of these several finds of human skeletal material it was determined by the Corps of Engineers that a full scale excavation would be economically preferable and further would insure that the obligation of the agency to the Nez Perce Indian Tribe would be fulfilled. It was decided to trench the area using equipment supplied by the U.S. Army Corps of Engineers, with the objective of locating any other burials which might still be interred at that location. The contract, DACW68-81-A-1315, between the U.S. Army Corps of Engineers, Walla Walla District and the Laboratory of Anthropology, University of Idaho, was the result. The previously recovered remains will be reinterred at the Nez Perce Tribal Cemetery, Spalding, Idaho.

On 5 October 1981 Sprague and Priscilla Wegars, Research Associate, visited the site and determined where the search trenching was to take place. Also present were two Corps of Engineers workmen who were delivering the backhoe which was to be used for the excavations. Two stakes, one on land and one in the water, marked the locations of burials already recovered. These were burials 1 and 4, respectively, which had been removed, along with others, on 6 May 1981. A datum stake had been placed elsewhere on the site during previous archaeological work, but although it was metal and painted orange, it could not be located.

Search Trenching

On 6 October 1981 Wegars arrived on site, as did Tom Cook, the backhoe operator, followed by Allen and Leier. They had hoped to be able to trench the entire bank parallel to the shore line, but this proved to be impractical due to the soggy nature of the subsoil, and the necessity of keeping the backhoe from getting stuck. Instead, trenches were put in perpendicular to the river bank.

These trenches were each 2 ft. wide, the width of the backhoe bucket, and some 3 to 5 ft. apart. They extended back from the shore for 14 to 20 ft., and were 3 to 4 ft. deep (Fig. 2). In all, ten trenches were dug on 6 October. No burials were found, so the trenches were then backfilled. Lithic finds included only one flake from the top of trench No. 7, and some finds at the water line in and near the project area. A few bone fragments were found on the surface near the location of Burial 1, but their size and condition made it impossible to determine whether or not they were human.

On 7 October 1981 Wegars, Cook, Allen, and Leier arrived on site following a heavy rainstorm. During the morning six more trenches were dug perpendicular to the bank; some of these were as much as 5 ft. deep. In the afternoon two more trenches were excavated, also perpendicular to the river. The first of these, No. 17, began at the end of trench No. 6, and served to extend that trench for an additional 35 ft. A second long trench, No. 18, was dug beginning immediately east of the end of trench No. 12; it also extended southeast for some 35 ft. Once again, no burials were located and the trenches were all backfilled. No artifacts were found except for some lithics recovered at the water's edge east of the project area. These finds, and those from the previous day, were tabulated onto an Archaeological Artifact/Sample Registration (Field) form (Table 1); they were then labelled with a site number and an artifact registration number and turned over to the Laboratory of Archaeology and History, Washington State University, Pullman.

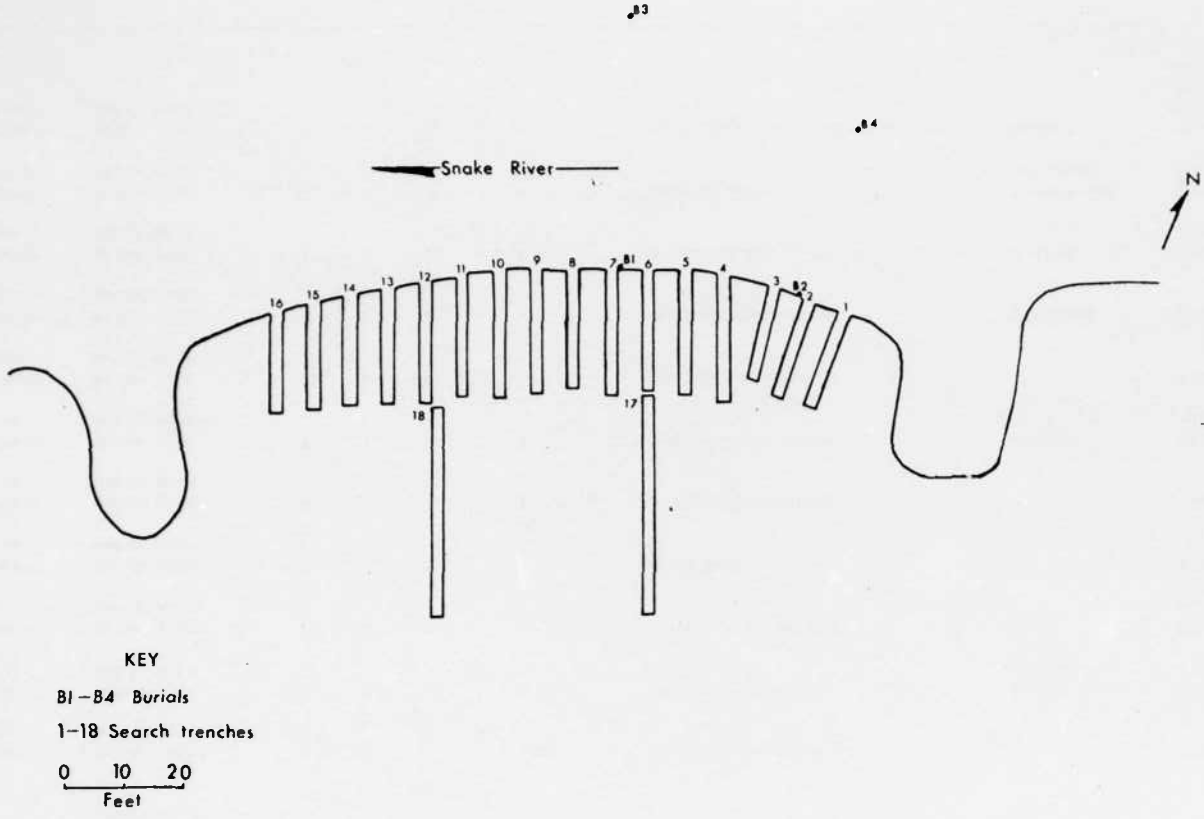


Fig. 2. Schematic plan of the search trenches excavated at 45-GA-18.

TABLE 1

Lithic material from Rice Bar, 45-GA-18, and its vicinity

Provenience			Artifact registration no.				Material	Worked or utilized	Description
SQ./OP.	Level	Other Data	Unit,	Lot,	Item,	Quantity			
1. Site	Surface	10 ft. in from shoreline	1.	1.	1.	1	Light brown chert	-	Flake
2. Site	Shoreline	Below high water mark	1.	2.	1.	1	Greenish siltstone	-	Fire-cracked rock
3. Site	Shoreline	Below high water mark	1.	2.	2.	1	Greenish siltstone	Possibly utilized	Struck
4. Site	Shoreline	Below high water mark	1.	2.	3.	1	Greenish siltstone	-	Struck or fire-cracked
5. W of site	Shoreline	Below high water mark	2.	1.	1.	1	Pink chert	-	Flake
6. W of site	Shoreline	Below high water mark	2.	1.	2.	1	Yellow-brown chert	-	Flake
7. E of site	Shoreline	Below high water mark	3.	1.	1.	1	Yellow-brown chert	Worked	Unifacial scraper (flake tool)
8. E of site	Shoreline	Below high water mark	4.	1.	1.	1	Gray-brown chert	-	Flake
9. E of site	Shoreline	Below high water mark	4.	1.	2.	1	Yellow-brown chert	Utilized	Flake
10. E of site	Shoreline	Below high water mark	4.	1.	3.	1	Black basalt	Worked	Unifacial cobble tool
11. E of site	Shoreline	Below high water mark	4.	1.	4.	1	Gray granite	Worked and utilized	Hammerstone/ chopper
12. E of site	Shoreline	Below high water mark	4.	1.	5.	1	Dark brown cryptocrystalline	Worked	Bifacial flake tool with surface adequate for awl/ drill, scraper, and spokeshave

The Burials Recovered from Rice Bar

At least nine individuals were represented among the human skeletal remains that were found at Rice Bar. Four of these individuals were from burials (burials 1-4), although portions of the skeletons from burials 1 and 2 were not actually recovered in situ. The other five individuals (a minimum estimate) were recognized among miscellaneous skeletal pieces picked up along the beach or just below the shoreline.

The information determined for or collected on each individual included the following where possible: sex; age; stature; presence or absence of cranial deformation; metric observations of the cranium and postcranium; non-metric observations of the cranium, postcranium, and dentition; and presence of any diseases and injuries. Sex and age were estimated using generally accepted standards (Krogman 1962; Bass 1971). However, in those instances where age could not be assessed in any other way, the relative amount of dental attrition served to suggest a probable age at death. Stature was not calculated for any individual because not one adult skeleton had an intact long bone. Metric and non-metric observations are not presented here; they will be included in a forthcoming study of the skeletal biology of the Nez Perce by Mulinski.

The sex and age estimations of the four individuals from burials are as follows:

Burial	Sex	Age
1	Female	35-45
2	Male	35-45
3	Female	15-20
4	Infant/Child	0.5-1.5

Burial 1

This adult female was a primary inhumation estimated to have been 47 in. below the original surface. There was no evidence of a cairn or container. The articulated body was deposited between the back and the left side (Fig. 3) with the right leg flexed, the left leg tightly flexed, and the arms to the chest. Orientation was 98° west of north (82° west of south) or down river. Because the skull had been disturbed, no data are available on position of the head. The skeleton of the individual from this burial was fragmentary and about 75-80% complete. The bone itself was only in a fair state of preservation. The cranium did not manifest any evidence of cranial deformation.

With respect to the pathology of the skeleton, slight osteophytic growth was present anterolaterally along the superior margin of the body of the third lumbar vertebra. Although the four other lumbar vertebrae were present, none showed definite signs of degenerative disc disease. Also, both tibiae and fibulae exhibited slight changes indicative of osteomyelitis.

Wear on the teeth was marked, with all four first molars having very little enamel remaining. The maxillary alveolar structures showed slight resorption, according to criteria set up by Brothwell (1963). In addition, the upper right third molar and the upper left second molar were missing antemortem. All 16 of the lower teeth were present.

Burial 2

This adult male was also a primary inhumation with no evidence of a feature or container. Deposition was on the right side and the position was flexed with the hands probably to the face (Fig. 4). The orientation was 1° west of north or across the river. Due to disturbance little more can be said about the cultural elements of this burial.

The skeleton of this individual was fragmentary and about 60-70% complete. Like the condition of the bone from Burial 1 the bone from Burial 2 was only in a fair state of preservation. The cranium did not manifest any evidence of cranial deformation.

The only pathologies exhibited by this individual were associated with the teeth and jaws. Specifically, an abscess associated with the maxillary left first premolar was present. The maxillary alveolar structures also exhibited slight resorption, and the mandibular left central incisor was missing antemortem. Finally, dental attrition was as marked as that of the individual from Burial 1.

Burial 3

The skeleton of the individual from this burial was very incomplete. In fact, the cranium was missing, and this individual was represented only by a fragmentary mandible with some teeth and some fragments of the postcranium. The bone was in a very poor state of preservation. No pathologies or injuries were observed. No cultural observations could be made.

Burial 4

The skeleton of this infant/child was represented by some cranial fragments (but no teeth), the left humerus, the left scapula, the left clavicle, the left femur, the left tibia, a fibular shaft, the right ischium, the left ilium, and many rib fragments. No pathologies or injuries were observed. No cultural observations could be made.

Miscellaneous Material

The human skeletal material that was not definitely associated with the four burials described above was sorted into cranial and postcranial elements. Among the former, five individuals were identified, while among the latter, four individuals were recognized. All of these individuals were represented at most by only a few bones each; some were represented by only

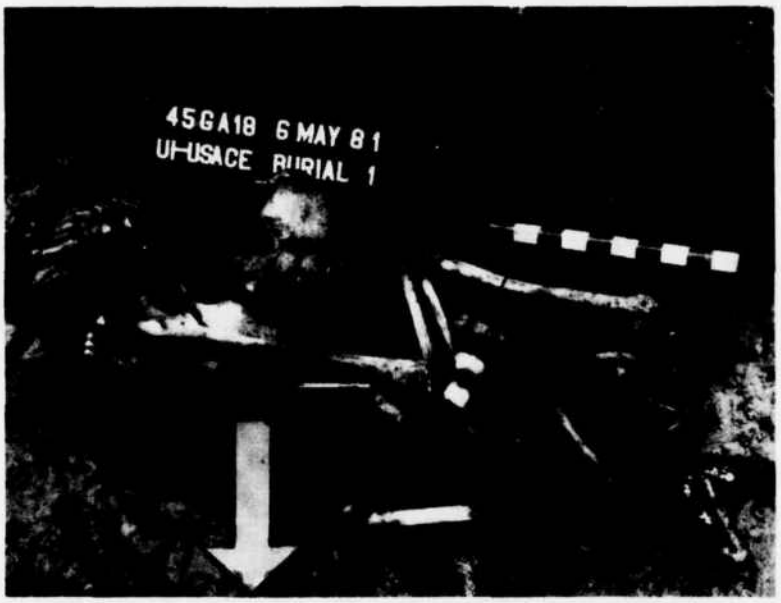


Fig. 3. Burial 1, 45-GA-18, exposed.

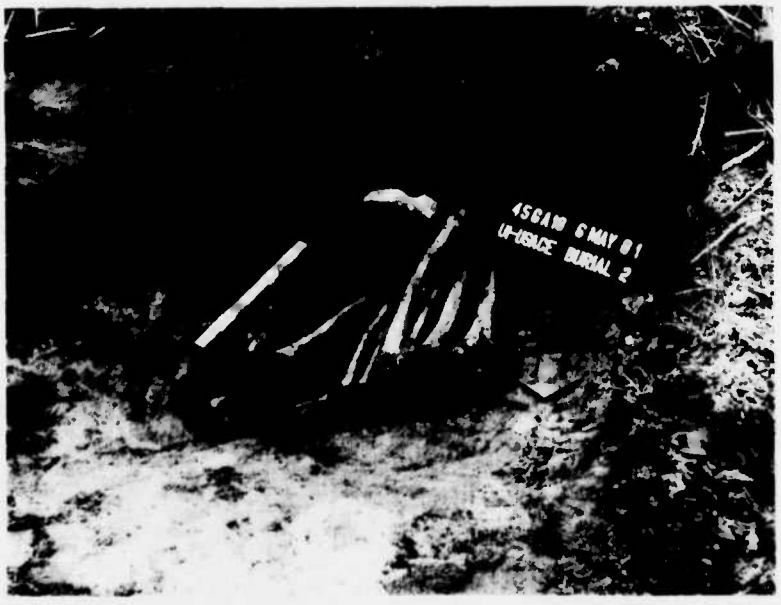


Fig. 4. Burial 2, 45-GA-18, exposed.

one fragmentary bone. One of the individuals identified among the cranial fragments was a sub-adult; all of the others were adults or possible adults. It was not possible to determine if the four individuals represented by the adult and possibly adult cranial remains were the same or different individuals as those represented by the postcranial remains. Besides those miscellaneous postcranial fragments assigned to individuals, there were at least 30 other postcranial parts. These could belong with any of the miscellaneous individuals, or even perhaps with the individuals from the numbered burials. In conclusion, there were at least five individuals represented in the miscellaneous material from Rice Bar.

More specifically, two of these individuals were adults, two were either sub-adults or young adults, and one was definitely a sub-adult. One of the individuals identified among the cranial fragments was a male of at least 30 years of age. Among the postcranial elements, one adult was determined to be a male and one was a female.

The right femur of this latter female's skeleton exhibited the only noteworthy feature of the miscellaneous individuals. The shaft of this femur exhibited abnormal changes of unknown etiology. It appeared as if the superior end of the shaft had been compressed laterally, with an extreme narrowing of the medullary cavity. The area that was affected included at least 80 mm of bone. Looking at this area from the anterior, a large crescent-shaped notch marked the medial side of the femur. There was no evidence of bone formation, only bone resorption. The surface of the affected area was smooth. Unfortunately, the entire proximal end of this femur was missing. Neither the left femur nor any of the other bones that were present seem to have been altered.

The scant evidence derived from the Rice Bar burial site fits well within our current knowledge of late prehistoric burial practices of the ancestral Nez Perce. Flexed, primary inhumations on the side or back and oriented westerly is a thoroughly predictable pattern (Sprague 1967; Rodeffer 1973).

Conclusions and Recommendations

The search trenching of 45-GA-18 has established, almost beyond doubt, that no more burials remain in that area. It would appear that Burial 1 was situated farther back from the edge of the river than any other. Because of the necessity for spacing the search trenches 3 to 5 ft. apart, however, one cannot rule out the remote possibility that additional burials will come from the unexcavated areas. Since those eroding previously have been brought to the attention of the proper authorities by Delbert Taylor, it was recommended that Mr. Taylor be commended for his past efforts, and encouraged to continue to include 45-GA-18 in his usual rounds.

III. BURIAL RECOVERY AND ARCHAEOLOGICAL MONITORING OF THE LYONS FERRY FISH HATCHERY PROJECT AT THE JOSO TRESTLE CONSTRUCTION CAMP, 45-FR-51, LOWER MONUMENTAL PROJECT

Introduction

On 9 September 1981, Priscilla Wegars, Research Associate for the Laboratory of Anthropology, University of Idaho, reported to the Lyons Ferry Fish Hatchery construction site at the request of LeRoy V. Allen, Archaeological Coordinator, U.S. Army Corps of Engineers, Walla Walla District, and Roderick Sprague, Director, Laboratory of Anthropology, University of Idaho. The project area (Fig. 5) was that of the Joso Trestle Construction Camp site, 45-FR-51, excavated in 1980 by a team from the University of Idaho (Wegars and Sprague 1981).

Although the archaeologists had requested notification in advance of earthmoving, some failure in communication must have taken place, since a large area on the upstream side of the trestle had been graded off for use as a parking area for heavy equipment and more extensive grading work had been done on the downstream side of the trestle. A chain link fence had been placed around an area of prehistoric housepits, as recommended by

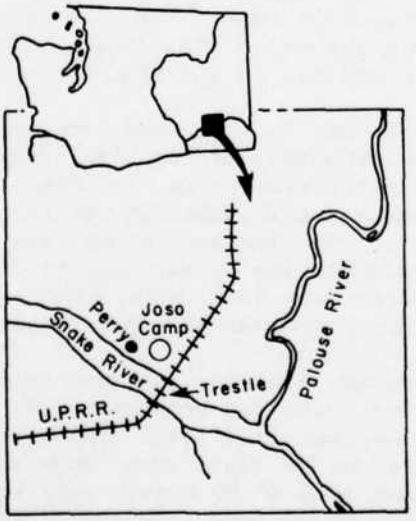


Fig. 5. Location of the Lyons Ferry Fish Hatchery Project, at the Joso Bridge Construction Camp site, 45-FR-51.

Washington State University archaeologist Randall Schalk (1983:184-186). A few historic artifacts were visible on the surface of the graded areas and those that were diagnostic were collected; slide photographs were taken to show the extent of earthmoving activity which had taken place before the archaeologists were notified.

On 10 September Wegars returned to the site to learn when more digging would take place. Bob Ross, Construction Representative and Dave Opbroek, Project Engineer for the Corps of Engineers, both expressed a willingness to keep the Laboratory of Anthropology informed of future earthmoving activities, as did Jack Stenstrom, a representative for Chuck Kelch the prime contractor and Einar Frimodt, the subcontractor for the grading.

Recommendations made at that time included the necessity for a monitor to be present during earthmoving for the central portions of the fish raceways and for the residences adjoining the river; that a monitor be called to the site should prehistoric or historic features, including burials, be located; and that additional archaeologists might need to be summoned to assist the monitor should conditions warrant.

Monitoring

On 15 September, Wegars happened to be in the area on other business hence called in to see Opbroek who said that a pipe trench for a sludge line was being put in across the site, again for which there was no advance notice to the University of Idaho. Wegars visited the area accompanied by Mary Condon, Gerald K. Landreth, and Shannon O'Dell, all graduate students in the Department of Sociology/Anthropology at the University of Idaho and members of the 1980 excavation team. The four archaeologists walked over the site and retrieved a number of diagnostic artifacts from both the pipe trench and the surface; however, no additional features were noticed.

On 16 September, Michael A. Pfeiffer, Anthropology graduate student at the University of Idaho and member of the 1980 excavation team, was sent to the Fish Hatchery construction site to begin monitoring earthmoving operations. Pfeiffer collected a number of artifacts that day and on 17 and 18 September from both the surface areas and from the pipe trench excavations. He also examined the entire length of the trench but found no trace of buried features and took some slide photographs showing the disturbed project area both upstream and downstream from the trestle.

On Monday 21 September, Pfeiffer returned to monitoring. A trench for a 5 ft. diameter pipe was being dug beginning just north of the fenced-off area protecting the aboriginal house pits. This trench was to extend across the site roughly parallel to the first one. More diagnostic artifacts were found in the morning and some 60-80 bottle caps were noticed in the areas north and east-north-east of the pond. In the afternoon Pfeiffer recorded a minor trash dump directly in the path of the backhoe and estimated that it was located near former Feature 240/1 (Fig. 6). The artifacts from this feature, which was designated M1, are summarized in Table 2.

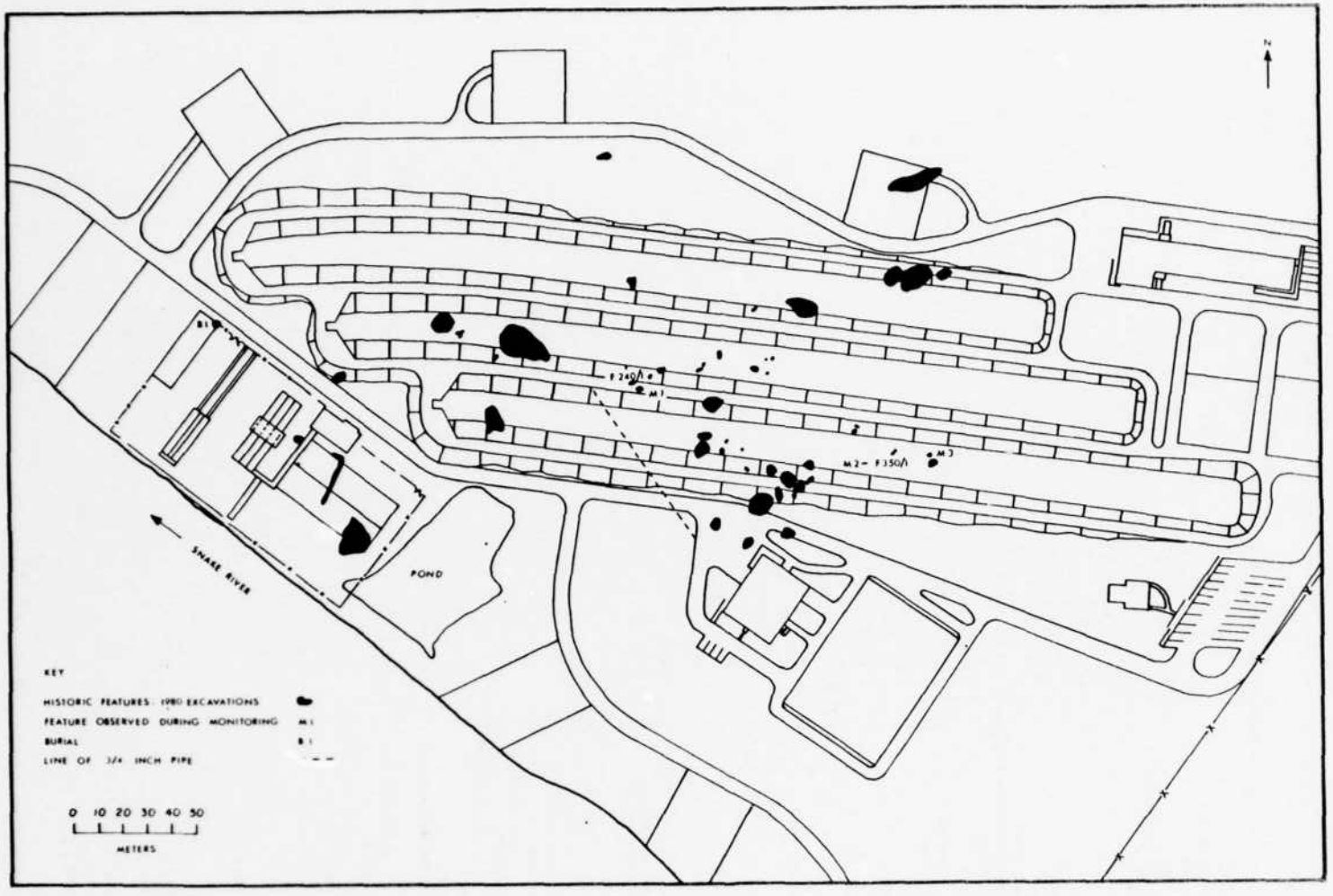


Fig. 6. Location of features found during monitoring of earthmoving operations at the Lyons Ferry Fish Hatchery project.

TABLE 2

List of artifacts recovered from features found during monitoring at 45-FR-51

Artifacts	Feature M1	M2(350/1)	M3a	M3b	M3c	Total
Ceramic						
earthenware						
clay pipe			1			1
vessel	6	1				7
porcelain						
doll fragments			2			2
stoneware						
crock		1	17		12	30
Glass						
bottle						
beer			93	5		98
gin		30	1			31
medicinal		27				27
miscellaneous fragments	7	766	312	10	279	1374
whiskey		3	13	12		28
wine		120	7		1	128
cut or pressed	5					5
lamp chimney			1			1
stopper		3	4			7
tumbler			4			4
unknown						
melted			12		6	18
Metal						
brass						
cartridge						
.22 cal.						1
.38 cal.	1		1			1
12 ga.			1			1
brass/iron						
pole tip			1			1
iron						
bottle caps with cork inserts		11	106	23	22	162
bottle openers			1		1	2
bridge spike			2		1	3
can		7		7	11	25
snuff		1		1		2
tobacco			1			1
hacksaw blade					1	1
handle						
can or bucket			2	2		4
hardware						
miscellaneous			1			1
nail		2	18	9	8	37
strap		1				1
suspender part		1				1
tack						
roofing			1			1
unknown			1			1
Lead						
foil seals/labels			41	1	28	70
Miscellaneous						
coal			4			4
coal slag		1				1
mica		1			1	
poker chip					1	1
Organic						
bone			15	6		21
cork						
bottle		2	22	2		26
leather			5			5
shell			2			2
shell button			1	1		2
tar paper				3		3
wood/bark			7			7
Total	19	977	701	82	371	2150

On 22 September, Pfeiffer recovered additional diagnostic artifacts from the surface east-north-east of the pond. In the afternoon he located a large glass scatter which looked as if it might go quite deep, so he telephoned Roderick Sprague and asked for two additional workers, as it was not feasible for one person to both excavate and monitor. Jon Horn, another University of Idaho Anthropology graduate student and 1980 excavation crew member, and Gerald K. Landreth arrived in the early evening and cleared the area around the feature, designated M2.

The next morning Pfeiffer, Horn, and Landreth arrived on site to find that graders had been over the area and had obliterated the feature. Once it was relocated, the archaeologists staked and flagged it to avoid further such difficulties. Pfeiffer continued to monitor and located an old, 3/4 in. diameter pipe line which had been cut in at least two places by the newly-constructed pipe trenches (Fig. 6). Some of the old pipe remained in situ, and had stove parts packed around it; since these were both above and below it, it would seem more likely that it was associated with activities occurring later in time than the Joso Bridge construction camp.

Meanwhile, Horn and Landreth excavated Feature M2. They noted that a shallow backhoe trench cutting the west side of this feature yielded a stake with lettering on it which indicated that this was the location of Historic Feature No. 30, mapped by a Washington State University excavation team in the summer of 1980. That feature was designated F350/1 during the University of Idaho field season, and one quadrant of it was excavated at that time.

While the surface of Feature M2 was disturbed, with artifacts scattered over a wide area, the feature itself measured some 70 cm in diameter, with cultural material occurring in a light soil fill to a depth of approximately 30 cm. The artifacts recovered are summarized in Table 2.

If Feature M2 were indeed the same as Feature 350/1, we would expect to find crossmends among some of the broken artifacts, particularly the ceramics and glass. Since a number of fragments of Gordon's gin bottles were present in both features, these were closely compared to see if any could be joined together. One crossmend was achieved, thus suggesting even more strongly that Features M2 and 350/1 are in fact the same.

Feature M3 was located that afternoon some 20-25 m east of Feature M2; Landreth and Horn began to clean it of its surface disturbance, continuing on 24 September. It then became apparent that there were three discrete areas of interest; these were labelled "A," "B," and "C," and were excavated separately. Areas A and B appeared to be relatively intact below their surface disturbance, and extended to a maximum depth of 20 cm. While Area A had a slag deposit concentrated in the center, the fill of both A and B consisted of charcoal, coal slag, and coal, interspersed with artifacts. Area A measured 160 cm north-south by 220 cm east-west, and Area B measured 220 cm north-south by 290 cm east-west.

Area C, which measured 90 cm north-south by 130 cm east-west, was shallow and disturbed, and may in fact have been material which the earthmoving equipment had scraped from Areas A and B and which was then

deposited in a nearby depression. Artifacts from all three areas are summarized in Table 2. Following excavation of Feature M3, Horn and Landreth returned to Moscow, leaving Pfeiffer to monitor.

Continuing on 25 September, Pfeiffer took more color slides of the area and monitored grading operations in the northeast corner of the site as well as ditching activity on the north side.

The poor communication on the part of the project engineer, combined with the original attitude of the Washington SHPO toward this unique historic site (Wegars and Sprague 1981:1) and the agency attitude exemplified in the total destruction of the historic component-but cyclone fence around the prehistoric house pits-all lead to the conclusion that Pacific Northwest archaeology has a long way to go in realizing the true value of historical archaeology.

The Burial

On Monday, 28 September, Pfeiffer returned to monitor, finding few artifacts and no features. On the morning of 29 September he walked over the central area and picked up a number of artifacts which had been uncovered by rain. That afternoon, while monitoring earthmoving activity near the northwest corner of the fenced area, he observed a bulldozer cut into a burial. After stopping the bulldozer operator, Pfeiffer cordoned off the area, notified Sprague, and collected what could be found of the disturbed portion of the burial, including pieces of wood, scraps of hide, and fragments of bone, particularly a mandible and parts of a skull in very poor condition. Pfeiffer then returned to Moscow, since the sum of $1500.00 which had been allotted for all monitoring, had been reached.

On Monday, 5 October, Sprague and Priscilla Wegars, together with LeRoy V. Allen and John Leier, Co-op Trainee Archaeologist for the U.S. Army Corps of Engineers, met at the site and excavated the burial. It was a single, primary inhumation in a canoe (Fig. 7), which was located adjacent to some prehistoric house pits in a sand dune area of an alluvial bar.

The cedar canoe containing the burial had been truncated at the foot end, and placed into a pit or cist, the sides of which had been faced with cedar uprights, from the same canoe (Fig. 8). Because the body had been wrapped in a hide for burial, and because of the tendency of the canoe to hold water, bone preservation was extremely poor. Because of this extremely poor preservation, little in the way of cultural or osteometric data was salvageable. The individual was deposited on the back, fully extended, and oriented west. Based on the length of the long bones, measured in situ, it is assumed that this was an adult of undetermined sex. It is speculated that the hands were crossed on the pelvis. The remains will be reinterred at the Palus Reburial Site overlooking the original burial location.

The hide, possibly buffalo, was found to have been infested with some sort of beetle. Numerous insect remains were collected from both the burial and the hide, and were examined and identified by James B. Johnson of the Department of Entomology, University of Idaho. Puparia of blowflies (Diptera: Calliphoridae) were in the majority. Also present were elytra

Fig. 7. Photograph of canoe burial container, top in place.

Fig. 8. Photograph of canoe burial container, bottom exposed.

(wing covers) of skin beetles, *Trox atrox* Le Conte (Coleoptera: Scarabeidae). Because blowflies infest new bodies, these probably entered the grave on the body. Skin beetles, on the other hand, infest old carcasses and skins. They are active from late April to mid-August, peaking around June and July. While they can and do burrow, and so could have reached the remains during the summer following its burial, it is more likely that they entered the grave on the hide at the time of burial, which would argue for an early summer interment.

Also found with the burial were some fragments of cloth, which were analyzed by Professor Shirley Medsker of the School of Home Economics, University of Idaho. After examining the fabric under a microscope Dr. Medsker concluded that it was a plain weave which appeared to be cotton. This determination was not certain, however, due to the presence of extensive mineral deposits on and within the cloth fibers, obscuring identification. These same deposits also interfered with the burning tests which were performed. While these tests were also inconclusive, Dr. Medsker observed that the fibers burned "more like a cellulose fiber, such as cotton, than like protein fibers, such as wool or other animal fibers" (Shirley R. Medsker 1981: personal communication).

Ethnographic Canoe Burial

Ray (1942:218) lists canoe burial as absent or denied for the Klikitat, Tenino, Umatilla, Kittitas, Wenatchi, Sanpoil, Kalispel, Shuswap, Lillooet, Lower Thompson, Chilcotin, Lower Carrier, Kutenai, Flathead, and Coeur d'Alene. However, all of the secondary features mentioned (canoe perforated, suspended in tree, etc.) would indicate questions directed toward above ground canoe disposal rather than below ground.

The use of canoes to cover above ground disposal in the Plateau is noted for the Carrier and other Athabaskan speakers by Father Morice (1893:121) as follows: "the birch-bark canoe of the dead person was left upside down by way of cover to this aerial grave." Earlier, Petitot (1876:xxvi) while speaking of Athabaskan speakers in general mentioned also the setting adrift of the canoe, again a bark canoe. He said: "son canot d'écorce est renversé sur la tombe ou bien lancé au gré du courant [his canoe of bark was turned upside down over the tomb, or cast loose at the mercy of the stream]."

For the Athabaskan speaking Nicola of British Columbia, Wyatt (1972:183) says "burials were in the ground or in rock slides, and canoes occasionally marked the tops of graves."

No clear indications of the use of canoes came from Salish ethnographic sources, thus clearly separating the Northern Athabaskan use of the canoe from the Southern Plateau use by Sahaptan speakers.

The journals of Lewis and Clark (Thwaites 1904-05, III:139) present an excellent description of burial vaults contained on Blalock Island in ethnographic Umatilla territory:

> ...on the upper part of the island we discovered an Indian Vault, our curiousity induced us to examine the method those natives practiced in depos[it]eing the dead, the vau[l]t was made by broad poads [boards] and pieces of Canoes leaning on a ridge pole which was Suported by 2 forks Set in the ground six feet in hight in an easterly and westerly direction and about 60 feet in length, and 12 feet wide, in it I observed great numbers of humane bones of every description perticularly in a pile near the center of the vault, on the East End 21 scul bones forming a circle on Mats; in the westerly part of the *Vault* appeared to be appropriated for those of more recent death, as many of the bodies of the deceased raped up in leather robes, lay [*in rows*] on boards[s] covered with mats, &c [*when bones robes rot, they are gathered in a heap sculls placed in a circle*] we observed, independent of the canoes which served as a covering, fishing nets of various kinds. Baskets of different Sizes, wooden boles, robes Skins, trenchers, and various kind of trinkets, in and suspended on the ends of the pieces forming the vault; we also Saw the Skeletons of Several Horses at the vault a great number of bones about it, which convinced me that those animals were Sacrefised as well as the above articles to the Deceased.

In contrast, the journal of Private Joseph Whitehorse (Thwaites 1904-05, VII:176) of the Lewis and Clark Expedition presents a different picture from the preceding day. "When any of the natives dies they deposit all their property with them. We Saw one of their grave yards today, even a canoe was Split in peaces and Set up around the yard Several other art. [articles] also." On the same day and apparently describing the same scene, Sergeant John Ordway (Quaife 1916:301) of the Lewis and Clark Expedition described it this way, "When any of these Savages dye they bury them and all their property with them and pikett in their grave yard. even their canoes are put around them." A third description comes from the journal of Sergeant Patrick Gass (1807:152-3) also of the Lewis and Clark Expedition who said, "The custom prevails among these Indians of buring all the property of the deceased, with the body. Amongst these savages when any of them dies, his baskets, bags, clothing, horses and other property are all interred: even his canoe is split into pieces and set up round his grave."

This evidence for canoe burial among the Umatilla is suggestive of contact with burial shed burial further down the Columbia River rather than a clear example of earth inhumation in canoes.

Click Relander has described several Wanapum burials of members of the Smowhala Nativistic Movement. One was wrapped in buckskin and mats with half of a canoe over the body (Relander 1956:39). Another burial of a girl was in a grave dug with an elk horn and bare hands; the body was wrapped in skin and again it was covered with a canoe (Relander 1956:78).

Curtis (1911,VII:9) while working with the Yakima in 1906, reported that canoe burial was formerly the method of disposing of the dead. The body would be wrapped in deer skin and then taken to a rocky place where it was laid in one canoe and covered with pieces of another. Informants on the Yakima Reservation still speak of canoe burial in the Fort Simcoe area.

An informant described a canoe burial of an adult male of high social status on Fish-hook Island some time between 1915 and 1920. The individual buried was a Palus or "Snake River Indian." The process involved the usual practice of cutting the canoe in two and using one end under the body and one end over the body.

Archaeological Canoe Burial

The archaeological record gives us little more in the way of evidence of or a clear understanding of canoe burial as a dominant form at any specific time or place in the Southern Plateau. However it does seem to be an alternative form among Sahaptins in the historic period.

Smith (1910:140) describes a potted grave near the mouth of the Naches River that "seemed to be walled up with rocks like a well and slabs of a broken canoe...surrounded...the disturbed bone." Quoting a Mr. W. H. Hindshaw, Smith (1910:142) states that 16 to 30 mi. up the Snake River a burial on a bluff overlooking the river "was curbed with the remains of a cedar canoe."

Combes (1968:61-62) reports a canoe burial (No. 12) from Ford Island (45-FR-47), the excavation of which Sprague directed. The extended adult was oriented northeast, had been badly disturbed, and was in a very poor state of preservation. The body was clearly placed in one-half of a canoe. It is surmised that the other half was placed over the top but there was no clear evidence of this. The burial dates after 1840, the date of the invention of the Prosser button, several of which were found.

The Palus Burial Site (45-FR-36B) is less than a mile upriver from the Joso Trestle burial. The site, excavated in 1964 (Sprague 1967:7), contained 261 burials of which 11 were inhumed in canoes (Sprague 1965). Two infants were semiflexed while the remaining individuals were all adults (6 - male, 3 - female) and extended. The extended burial of infants in contrast to flexed adults has been noted before in the Plateau (Sprague 1971:183) but this is the first indication of a reversal of the pattern. All were deposited on the back and oriented east (4) or northeast (5) with the exception of one infant, again a common "error" in Plateau burials. It is assumed that the small bundle resulting from wrapping an infant in deer skin and/or reed mats would not have an obvious head end and could easily be reversed prior to orientation. Six of the burials can be given *terminus post quem* dates. Four dates are 1840 based on Prosser buttons, one is 1865 based on a dragon side plate, and one is 1890 based on a silver pipe ferrule with a London maker's mark.

In terms of the ethnographic data, the Joso burial appears to be at the upper limits of the trait on the Snake River and well to the west of the climax while archaeologically it still represents the upriver limit but

appears to be at the sample population center. The late date of the Palus site canoe burials would lend support to a bi-polar distribution of the trait among north-central Sahaptan speakers during the ethnographic/historic period.

Of the burials in the immediate area, only the Palus site is known to have contained true canoe inhumations. The Palus Village site (45-WT-2) (Perry 1939; Nance 1966) contained cedar cist burials that very likely could have been made from canoes. According to one informant (Sprague 1967:106) at least one burial cist was definitely made from a broken canoe. The artifacts associated would have been protohistoric. Less than 1 mi. up the Palouse River from the cedar cist burials and less than 2 mi. from the Joso burial were a series of talus slope burials (45-WT-56) also of protohistoric or early historic date and marked with cedar or juniper canoe fragments (Sprague and Birkby 1970:5).

Other burial sites in the area that did not contain any clear evidence of the use of canoes include: 1) Mesa Burial site (45-FR-52) (Sprague and Birkby 1970:7) a disturbed historic site 5 mi. up the Palouse River; 2) Marmes Rock Shelter (45-FR-50) (Breschini 1979; Krantz 1979) including some of the earliest Plateau burials, 1 1/2 mi. up the Palouse River; 3) the Tucannon Burial site (45-CO-1B) (Iverson 1977) a badly disturbed late prehistoric to historic site 4 mi. up the Snake River from Joso; and 4) a site (45-CO-1?) destroyed by railroad construction in 1898 near the mouth of the Tucannon River (*Spokesman-Review* 1898).

Conclusions

The placement of one lone burial within easy walking distance of a cemetery that probably was functional during the same time period is very unusual for the Lower Snake River region. Ethnographic work by Miller (Sprague and Miller 1979:22) with Joseph Band Nez Perce informants on the Colville Reservation would suggest that the Nez Perce (and by extension related Sahaptan speakers west of the Palus) tended to bury drowning victims near the water and very close to where they were found. The sandy area where the Joso burial was found is the first easily dug location up from the shore line in that stretch of the Snake River. It is thus speculated that the Joso burial represents a drowning victim who was recovered from the Snake River in an early summer of the period 1820-1850. It is obvious that we need more ethnographic information on the special burial practices afforded those who died of drowning and the special status of persons buried in canoes.

IV. RECOVERY AND ANALYSIS OF THE BREMMER FAMILY BURIALS 45-BN-296, YAKIMA BRIDGE I-82 PROJECT

Background

On the evening of 6 July 1981 Roderick Sprague, Director of the Laboratory of Anthropology, University of Idaho, was alerted to the possibility of some "Yakima Indian burials" at a bridge construction site near Richland, Washington. The telephone call had come from Harvey S. (Pete) Rice of Eastern Washington University at Cheney, also the Highway Salvage Archaeologist for the State of Washington, who reported that heavy equipment grading for bridge I-82 over the Yakima River had disturbed two graves. Because the land was owned by the U.S. Army Corps of Engineers, Rice also notified LeRoy V. Allen, Archaeological Coordinator for the Walla Walla District.

Late the next morning Sprague, Rice, and Allen met in Pasco with Bob Aye, Project Engineer for the Washington State Department of Transportation. The decision was made to remove the burials under the emergency authority granted to the Corps of Engineers by the Interagency Archaeological Services' "Memorandum of Agreement on Burials," under which the Corps became the Lead Agency. The work was conducted under Contract DACW68-81-A-1315 between the U.S. Army Corps of Engineers, Walla Walla District and the Laboratory of Anthropology, University of Idaho.

Excavation of Burial 1

Proceeding to the burial site (Fig. 9), the investigators noted the condition of the exposed graves, which were located some 2 m (6 ft.) apart.

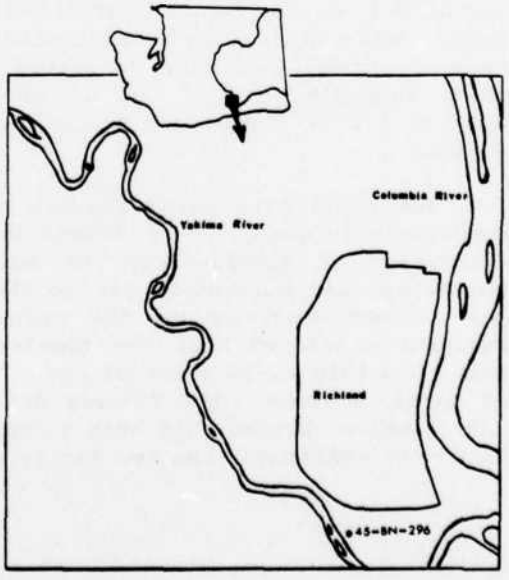


Fig. 9. Location of 45-BN-296.

One, designated Burial 1, had been badly disturbed by the construction equipment, and nothing in situ remained of the lower portion below the trunk. The second, Burial 2, appeared to be virtually intact, lacking only the foot end; however, a bridge piling had recently been driven in very near by, probably causing some damage to the remains. Sprague, Allen, and Rice, assisted by avocational archaeologist Nick Paglieri, past president of the Mid-Columbia Archaeological Society, removed Burial 1 and recovered scattered bones from it.

Burial 1 was so completely disturbed that a complete description of the position and deposition is impossible from just the archaeological evidence. From the evidence remaining, however, it is safe to assume that the burial was a primary, articulated inhumation, deposited on the back, and oriented 54° west of south. The head was turned to the right and the upper right arm was parallel to the body (Fig. 10). The only information pertaining to the coffin indicated a cedar box, 26 in. wide at the head end.

This led the archaeologists to suspect that these were probably pioneer burials rather than Native American. Acting upon that assumption, Paglieri telephoned local historians, one of whom, Martha Berry Parker, provided not only the information that the Bremmer family had lived near there, but also the name of one of the descendants still residing in the Tri-Cities area.

Bremmer Descendants Located

Paglieri contacted Mrs. Martha Nelson, daughter of Mrs. Mary Bremmer Ketchum, and learned that burials had taken place on what was then Bremmer property early this century. Through Mrs. Nelson, other relatives were notified of the discovery of the long-lost family graves. The next day, 8 July 1981, Burial 2 was scheduled to be removed. Present for this were Paglieri, LeRoy Allen, and Priscilla Wegars, Research Associate for the Laboratory of Anthropology, University of Idaho. Also present were Mrs. Martha Nelson, her husband Lyman Nelson, her sister Mrs. Mary Rasmussen, and their aunt, Mrs. Hilda Bremmer McBain, who came out to the site to confirm that the graves had been relocated. They said that if these were indeed their family's graves, they would contain the remains of Barney Bremmer, aged 16 1/2 at death, and his mother Ingeborg Bremmer, aged nearly 40 at death.

The previous evening Sprague had the bones recovered from Burial 1 superficially analyzed by Thomas M. J. Mulinski, Physical Anthropologist, Laboratory of Anthropology, University of Idaho. On the basis of the morphology and ruggedness of the skull, the size of the postcranial bones, the unfused condition of the epiphyses, and the dental characteristics, Mulinski concluded that the remains were probably from a sub-adult white male, possibly 12-18 years of age. Thus Burial 1 was almost certainly that of Barney Bremmer. The Bremmer descendants then advised the archaeologists that Ingeborg Bremmer had been a small woman, not quite five feet tall. If that were confirmed, the two family graves would have at last been located.

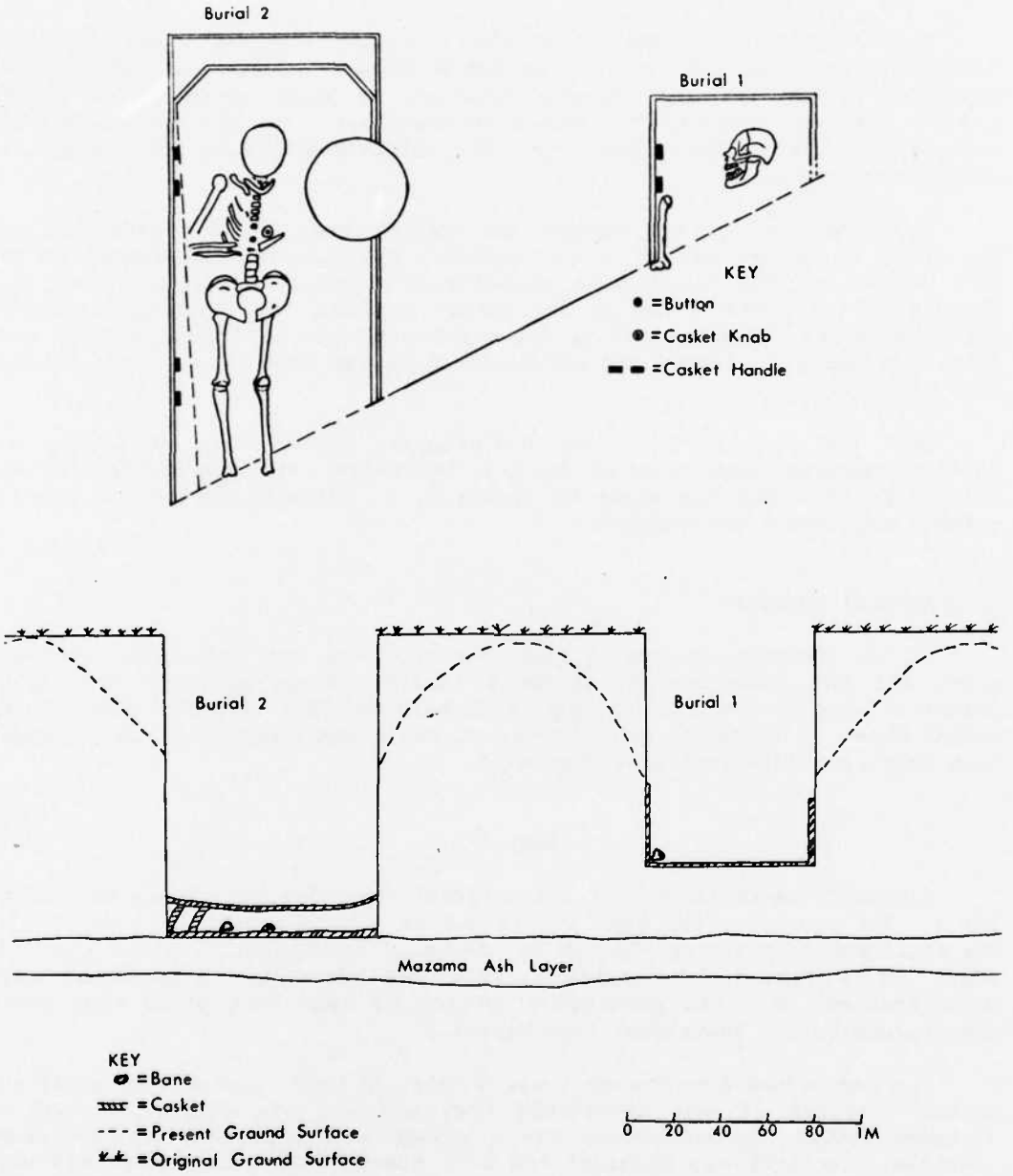


Fig. 10. Plan and profile of burials 1 and 2, 45-BN-296.

Excavation of Burial 2

Following the departure of the family members, Burial 2 was excavated by Allen, Paglieri, and Wegars. It was a primary inhumation, articulated, deposited on the back with the legs extended, the arms crossed on the chest, and the head with the chin compressed to the chest. The orientation was 54° west of south, the same as Burial 1. The coffin was a cedar box inside of a cedar grave liner.

Once the skeleton was exposed and photographed, it was measured, and was found to be 147 cm (56 in.) in length. Allowing for the absence of the foot bones and the usual poor correlation between skeleton length and stature this was very close to the height reported for Ingeborg Bremmer by her descendants. Damage done to the remains by the bridge piling was much less than had been feared and was confined to the area of the left clavicle and humerus.

With the consent of their descendants, the remains of Barney and Ingeborg Bremmer were removed to the Laboratory of Anthropology at the University of Idaho for study by Thomas M. J. Mulinski during the interim between excavation and reburial.

Osteological Analysis

Of the skeletons recovered from this site, one was that of a sub-adult male, and the other was of an adult female. Based upon the very minor amount of wear on the teeth of the young male and upon the morphology of the facial bones of his skull and of those of the older female, it was concluded that they were both basically Caucasoid.

Burial 1

Although the skeleton of the individual from this burial was only about 25% to 35% complete, the bone itself was in a good state of preservation. The skull was fairly complete but in pieces. Postcranially, other than the shaft of a fibula, the pelvic girdle and the lower limb bones were unrepresented, with the possible exception of some foot bones that could also belong to the individual from Burial 2.

The individual from Burial 1 was a male and based upon osteological and dental criteria it was determined that his age was between 16 and 22 (Krogman 1962). He apparently was a rather stocky person, as the right clavicle (the left was missing) and both humeri were quite short and very robust.

With respect to the dentition, a number of noteworthy features were present (Fig. 11). First of all, five teeth were missing antemortem. These were all four first molars and the upper right canine. It may be that they never erupted; but, if they had, they were certainly lost long before death. Second, the edges of the buccal/labial surfaces of the mandibular right first premolar through left canine (the right central incisor was lost postmortem) all exhibited rounded wear facets. Third, the maxillary second

Fig. 11. Maxillae and dentition of the individual from Burial 1.

molar on the left side had a prominent cusp on the mesial portion of its buccal surface, directly across from the site of where a Carabelli's cusp would appear. Fourth, the lower second molar on the right side exhibited evidence of occlusal caries. Fifth, the crown of the maxillary left third molar had an unusual morphology. Rather than being more or less square in outline, its occlusal surface was somewhat oval in shape, with its long axis oriented obliquely to the line of the postcanine teeth. The normal buccal surface of this anomalous tooth was shifted mesially. Additionally, the occlusal surface was marked by a fissure down the center of its long axis. Otherwise the surface was smooth, and no cusps or other anatomical features were discernible.

Finally, it should be pointed out that the right clavicle and both humeri showed signs of the minor effects of osteitis. More specifically, on the right clavicle cortical destruction was evident on the extreme medial aspect of the inferior surface (Fig. 12). The affected area was about 15 x 35 mm. On each humerus cortical destruction was evident on the superior aspect of the anterior/medial surface (Fig. 13a, *b*). In each case the affected area (ca. 20 x 50 mm) had two foci of destruction that were not contiguous. There was no swelling, nor was there very much growth of irregular bone.

Fig. 12. Medial end of right clavicle of the individual from Burial 1 showing cortical destruction of the inferior surface medially.

Burial 2

The skeleton from this burial was fairly complete, and the bone itself was in good condition, just like the bone from Burial 1. The inferior aspect of the anterior portion of the mandible exhibited green staining. There was also some green staining of the anterior surface of the left clavicle between the lateral third and half of this bone. Such staining is usually caused by copper or brass artifacts in proximity to the bone.

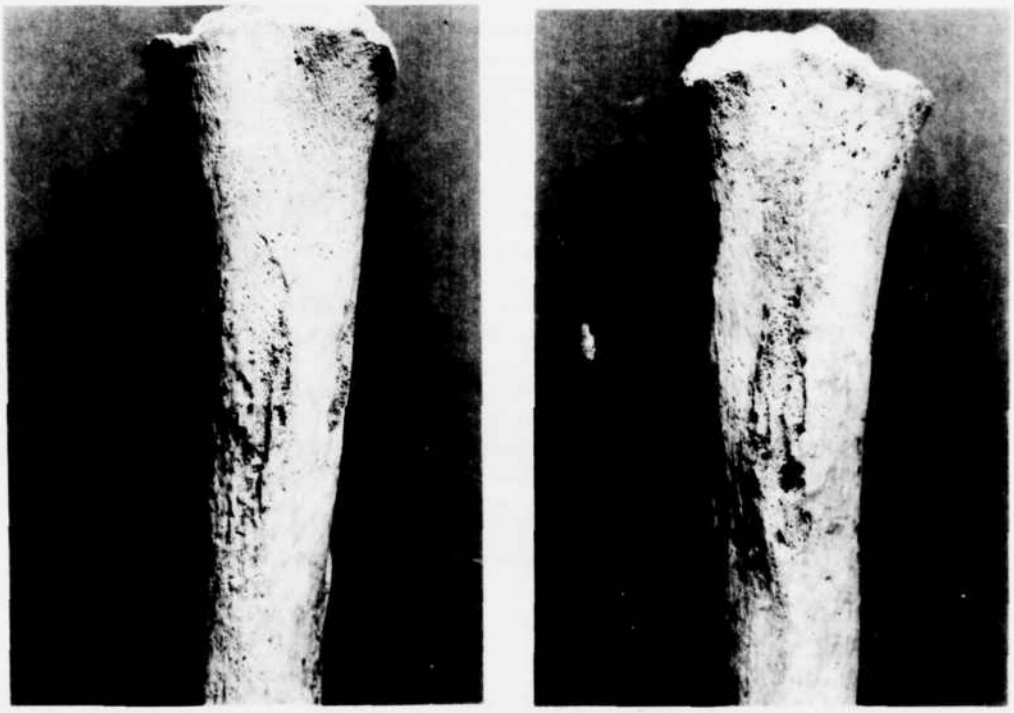


Fig. 13a. Superior end of right humerus of the individual from Burial 1 showing cortical destruction anteriorly and medially.

b. Superior end of left humerus of the individual from Burial 1 showing cortical destruction anteriorly and medially.

Based upon criteria set up for female pubic symphyses (Gilbert and McKern 1973), the age for this individual was estimated to be between 50 and 60. The living relatives, however, have stated that this female died in her 40th year. As has been pointed out by Suchey (1979), there can frequently be problems, even among experienced investigators, in correctly assessing age at death when using the Gilbert-McKern method of aging the female *os pubis*.

Because of the good state of preservation of the bone, a number of metric and non-metric observations were made. Furthermore, estimated living stature was calculated from the maximum lengths of the left femur (394 mm) and the left tibia (318 mm) using the formula devised by Trotter and Gleser (1952) for white females. Consequently, this individual was estimated to have been between 146.03 cm and 153.14 cm tall, or roughly between 4 ft. 9 in. and 5 ft. 1 in.

Dentally, the individual from this burial was almost edentulous. The only teeth that were definitely present were the maxillary canines and the mandibular incisors. All of these teeth were heavily worn, except for the upper right canine, whose crown was completely decayed. The upper left canine exhibited cervical caries labially, while the two mandibular incisors from the left side showed caries distally. All four of the incisors had calculus deposits. The bony sockets for all the six teeth present had been almost completely resorbed -- evidence of periodontal disease. The general condition of the teeth and the periodontal bone suggests an old individual who probably had had numerous dental problems, which is in line with the age estimate based on the pubic symphyses.

No pathologies of the cranium, other than those associated with the teeth and jaws, nor of the postcranium were observed.

Family History

Ingeborg K. Pikop was born in Lakota, Dakota Territory, in April 1870. Sometime in the late 1880s she married Rudolph C. (R. C.) Bremmer in Nelson County, North Dakota. Their oldest child, Frederick W., was born when Ingeborg was 19 years of age. During the depression of 1893 the Bremmers suffered from poor crops, so moved from North Dakota to Seattle. There, Barney Henry Rufus Bremmer was born on 13 October 1893. Work was difficult to find in Seattle, recalled Clara Bremmer Weidle, one of the Bremmer daughters (Parker 1979:28)

> People in Seattle were hard up; they had no money. Coxey's Army was forming and Dad wanted to go, too, but Mother talked him out of it. He had no money and it would cost him to get to Washington, D. C., and he would need money to eat on and get by. Mother could always get work; go out in the woods to pick up wood chips, take in washing, anything, almost, to make an honest dollar... But men often went away from home to work. That is how Dad came to eastern Washington. A man who had a wife and eight children in Seattle wrote from the Rosencrance ranch on the lower Yakima and asked his wife to find someone to drive their horses and wagon across the mountains. Dad did it and got board and smoking tobacco... That was in 1894.

The entire Bremmer family moved to Benton City, Washington that same year. In 1896 (or 1897 [Parker 1979:28]) R. C. Bremmer took up a homestead relinquishment on the Yakima River near Richland, where he and his wife lived with their three sons; Fred, Ralph, and Barney; and four daughters, Clara, Hilda, Alma, and Mary (Fig. 14).

On 6 February 1910, Ingeborg Bremmer died of measles complicated by pneumonia, as did her son Barney on 1 April of the same year. R. C. Bremmer buried them "on a high, rocky corner of their 12-acre farm, an area he expected would never be disturbed" (Wynne 1981:3). The graves were located on the family farm out of necessity. When the town of Richland was plotted, an area south of town had been set aside for a cemetery. Because that land proved too rocky for graves to be dug in it, families had to make other arrangements until a new location was found, some time after 1910 (Mrs. Mary Rasmussen 1981:personal communication).

Although R. C. Bremmer moved to Kennewick in 1914, he returned a number of times to try to locate the graves. He was never successful. By the time he died, in 1948, the graves of his wife and son were considered lost.

On Thursday, 23 July 1981 a reburial ceremony, sponsored by the U.S. Army Corps of Engineers, was held at the Riverside Heights Cemetery in Kennewick, Washington, near the grave of R. C. Bremmer. Some 25 persons attended (Mid-Columbia Archaeological Society 1981:3), mostly relatives of the deceased, including Ingeborg Bremmer's three surviving daughters, Clara, Hilda, and Mary, and the widow of Ralph, one of Barney's brothers.

In the case of the Bremmer burials, the archaeologists were fortunate that so many family members still remained in the area and that they were able to provide such accurate information, as well as photographs, about family members who died more than 70 years ago. In most cases, of course, we are not so fortunate and for that reason these burials were excavated and analyzed as if the people involved were, and would remain, totally unknown to us.

Artifact Inventory and Analysis

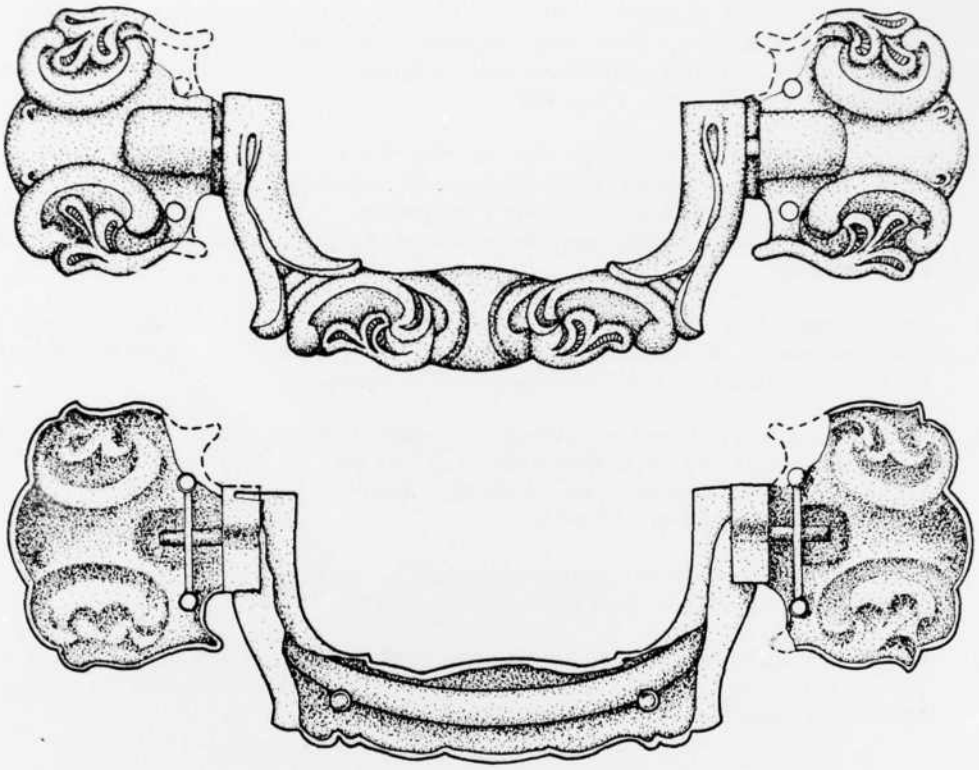
The recoverable fill from both graves was passed through a 1/4 in. mesh screen, enabling various items to be retrieved. Following their removal to the laboratory, the artifacts were inventoried and most of them were drawn and photographed prior to reburial.

Burial 1

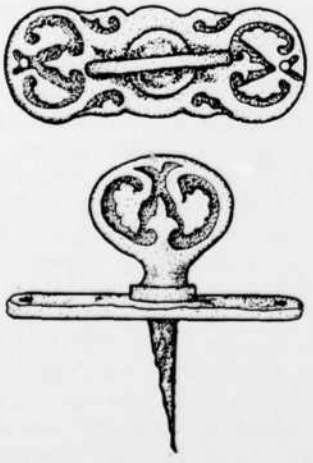
1. Cedar coffin fragments.

2. Metal coffin handle, silver-gilt over iron (Fig. 15*a*); 5 x 19 cm (2 x 7 5/8 in.). Based upon the location of this handle as found in situ, we feel this coffin would have had six handles. Similar handles were recovered from historic burials in Southern Oregon (Jenkins 1981:54, Fig. 28; 69, Fig. 40).

Fig. 14. A 1909 photograph of the Bremmer family, taken the year before the deaths of Ingeborg and Barney Bremmer. Front row, from left, are Alma, Rudolph C. (R. C.), Hilda, Ingeborg, and Mary. Back row, from left, are Ralph, Fred, Barney, and Clara.



a



b

c

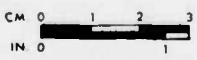


Fig. 15. Artifacts recovered from Burial 1. *a*, casket handle; *b*, ornamental knob from lid of coffin; *c*, button.

3. Metal knob from coffin, silver-gilt over iron (Fig. 15*b*); 5.5 x 6 cm (2 1/4 x 2 3/8 in.). This was probably an ornamental fastener for the lid; a total of six of these may originally have been present (Jenkins 1981:54, Fig. 28; 69, Fig. 40).

4. Round nails, length, 4.75 cm (1 7/8 in.); head diameter 0.6 cm (1/4 in.). Four whole ones were recovered, as well as five fragments with heads and miscellaneous other fragments. These are presumed to be from the coffin. Other nails remained in the wood and were not noted individually.

5. Screw, length 2 cm (3/4 in.), head diameter, 1 cm (3/8 in.). One whole one was found, which may have been used to screw the lid to the coffin. If so, others probably remained in the wood.

6. Wood fragments, showing traces of reddish-brown paint. The largest of these was rounded and measured 1.7 x 8.5 cm (1 3/4 x 3 1/4 in.). Although their purpose is unknown, they may indicate that the coffin was painted (Jenkins 1981:55).

7. Buttons, two, 4-hole, mother-of-pearl, measuring 1 cm (7/16 in.) in diameter (Fig. 15*c*), probably from a shirt.

8. Excelsior fragments, of which the largest piece measured 3 x 4 cm (1 1/8 x 1 1/2 in.). It looks like matted grass but since it came from under the head it may be from a pillow.

Burial 2

1. Inner and outer cedar coffins, tongue-in-groove construction, lined with fabric, probably silk (Erma Jean Jackle 1981:personal communication).

2. Metal coffin handles, silver-gilt over iron (Fig. 16a), a total of four. These consisted of left and right metal plates which fastened to the coffin, with a patented upward-swinging loop through which was passed a wooden bar having a decorative metal knob on each end. The metal plates measured 3.2 x 7 x 2.8 cm deep (1 1/4 x 2 3/4 x 1 1/8 in.), with the loop portion, at rest, extending out 3.7 cm (1 1/2 in.) from the coffin, and measuring 7 cm (2 3/4 in.) in length. Three left plates and four right ones were recovered. On the reverse of these was stamped "Patented Sept. 3, 1895 S.M.C. Co. 177." Examination of the Patent Records for that date revealed that patent No. 545,722 was issued for a "Coffin-handle" to "Frederick Ratcliff, New Bedford, Mass., assignor to the Pairpoint Manufacturing Co., same place" (Patent Office 1895:1446). "S.M.C. Co." probably stands for the Springfield Metallic Casket Co. of Springfield, Ohio (Thomas' Register 1941:4771). This company is known, from advertisements in *The Casket*, to have been in operation in 1895 (George W. Lemke 1981:personal communication). The knobs measured 3.2 x 4 cm (1 1/4 in. x 1 3/4 in.), with a hole diameter of 2.3 cm (7/8 in.); eight of these were recovered (two are required per handle). Although six was a more usual number of handles on a coffin, we feel certain that this coffin only had four

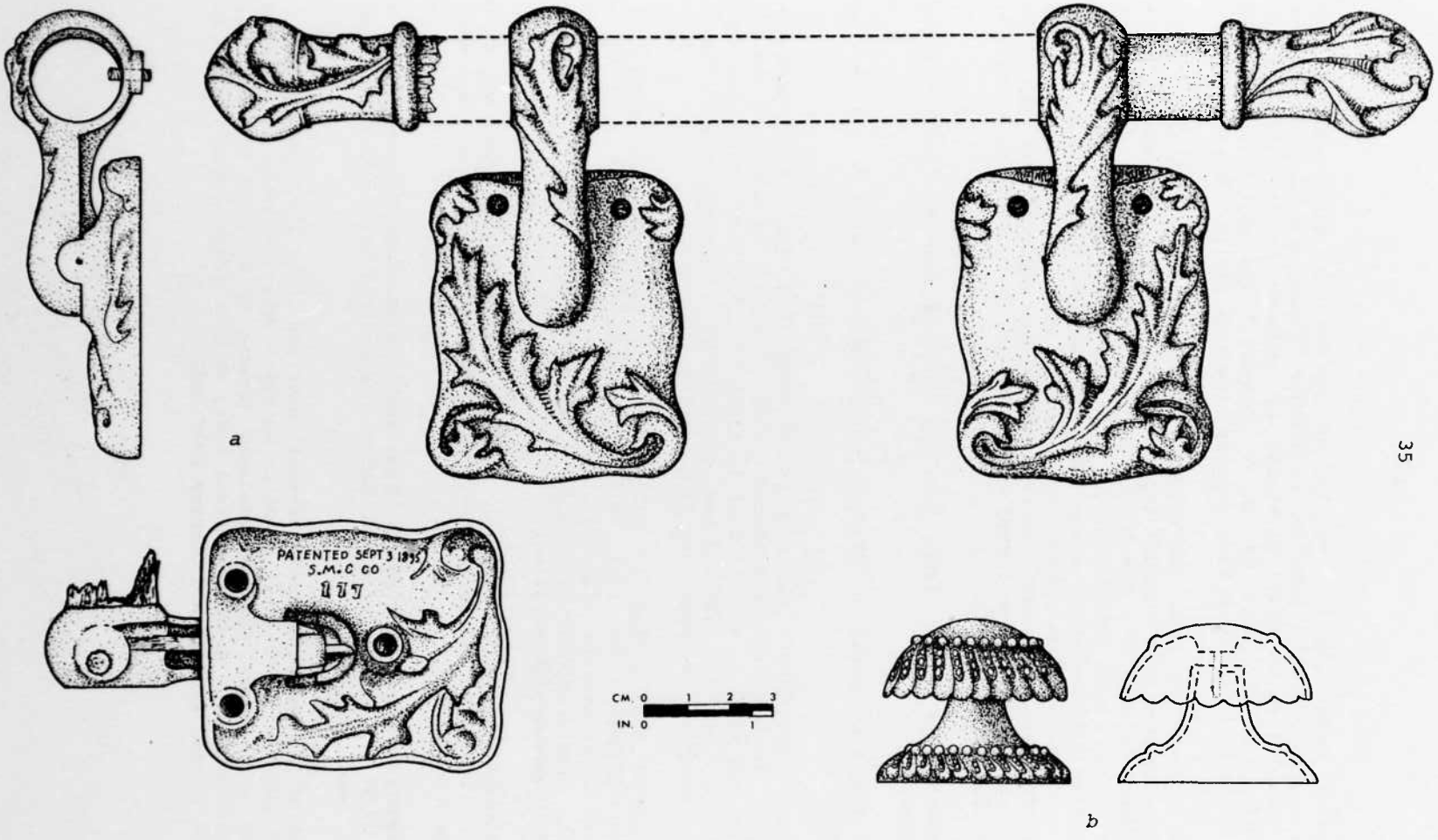


Fig. 16. Coffin hardware recovered from Burial 2. *a*, handles; *b*, lid ornament or knob.

handles, based upon the location of the two that were found in situ (Fig. 10a). Similar handles, reportedly "Patented Sept. 3, 1899" were recovered from an historic burial in southern Oregon; although the manufacturer was also "S. M. C. Company," the author stated that "nothing is known about this company" (Jenkins 1981:77, 81, Fig. 50).

3. Lid ornament or knob for coffin, silver-gilt over iron (Fig. 16*b*). This consisted of a circular top 4.5 cm (1 3/4 in.) in diameter, which probably screwed into the bottom portion, 5 cm (2 in.) in diameter; it was probably used for lifting the lid. How it was actually attached is a matter for conjecture since the screw portions were missing. Based on a reconstruction drawing of a coffin with similar knobs from a southern Oregon historic cemetery, there were probably two such knobs orginally present, one toward either end of the lid (Jenkins 1981:79, Fig. 48, 177, Fig. 54).

4. Miscellaneous unknown iron, possibly hardware from the coffin, three pieces.

5. Round nail fragments, no heads. The largest was 6.4 cm (2 1/2 in.) in length.

6. Buttons, one 4-hole and four 2-hole ones (Fig. 17a), all mother-of-pearl. The 2-hole ones measured 1.1 cm (7/16 in.) in diameter, and the large one was 1.5 cm (9/16 in.) in diameter. The four small ones were found in the chest area and are probably from a shirtwaist-type blouse. The larger one may have been from a skirt.

7. Octagonal iron buckle, probably originally fabric-covered, with belt fabric attached (Fig. 17*b*). The buckle measured 3.7 x 3.7 cm (1 1/2 x 1 1/2 in.), and the belt was 2.5 cm (1 in.) wide. The belt fabric was silk, with a synthetic, probably rayon, binding (Erma Jean Jackle 1981:personal communication).

8. Fragments of fabric, different from the coffin lining. This was also silk (Erma Jean Jackle 1981:personal communication) and may have been from a skirt.

9. Fragments of two brass safety pins, the largest of which measured 1 x 4 cm (7/16 x 1 1/2 in.), or comparable in size to a No. 3 which is 1 3/4 in. long.

10. Most of two imitation tortoise-shell hairpins (Fig. 17*c*), measuring 2.5 x 9 cm (1 x 3 1/2 in.). Similar hairpins were available for sale in 1900 in the Sears, Roebuck catalogue (Joseph E. Randolph 1981:personal communication). Nearly identical ones, an inch longer, were stocked in 1908 (Sears, Roebuck and Company 1908:1002).

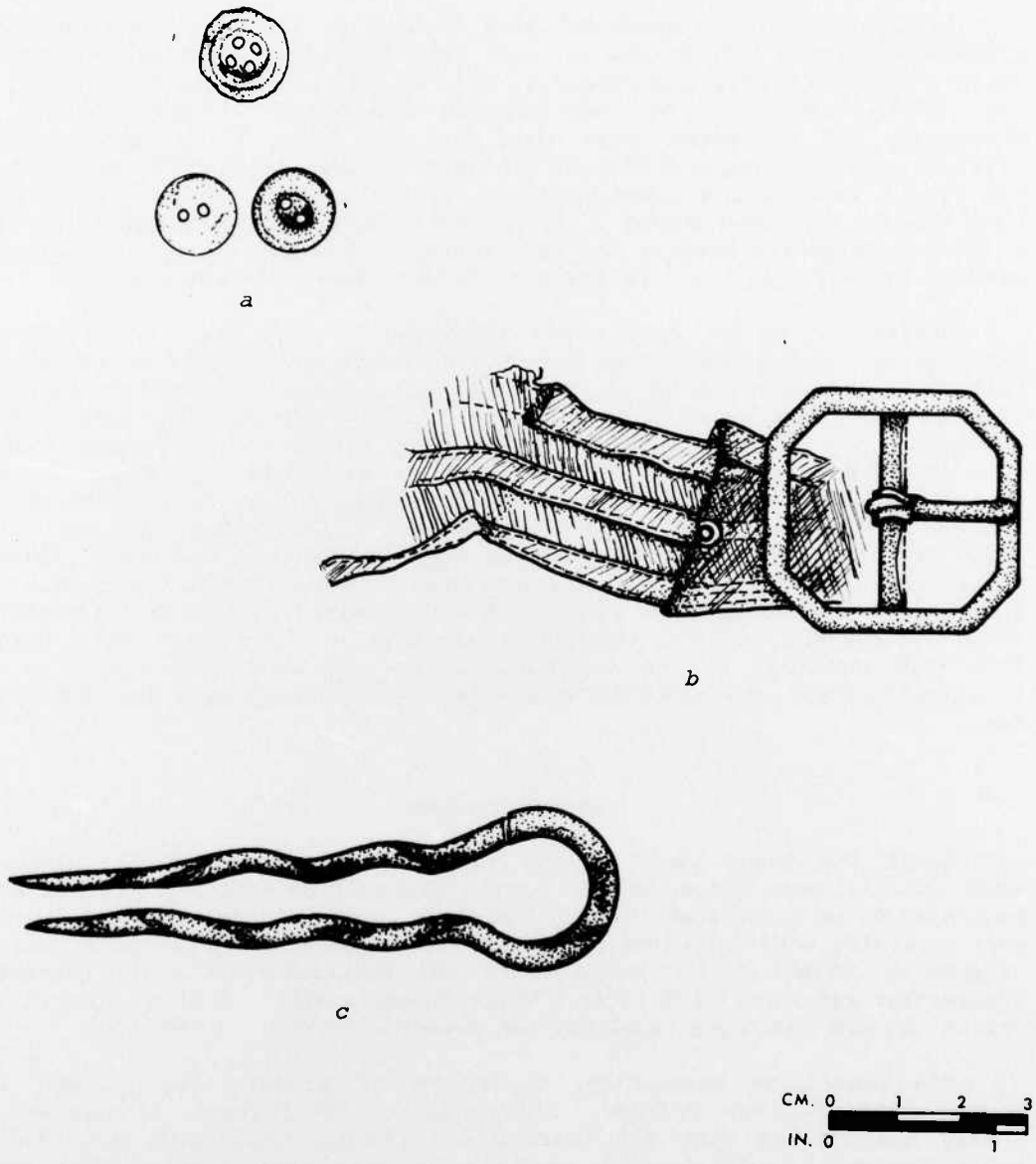


Fig. 17. Artifacts recovered from Burial 2. *a*, buttons; *b*, belt and buckle; *c*, hairpin.

Discussion

Little can be said about Burial 1 because of its incomplete recovery. From osteological information we know that it was a young man of sturdy build. Because Burial 2 provided us with dated information in the form of the coffin handles, we did not research the Burial 1 coffin handle as thoroughly as we would have done had it been a solitary burial. Stylistically, it compares with late nineteenth century examples pictured in the Patent Records and other sources. The only other thing we would have been able to say about Burial 1 is that this individual was probably wearing a shirt. If Barney Bremmer had been buried in the suit he was photographed wearing in 1909 (Fig. 14), no trace of it was recovered from his burial.

Burial 2, on the other hand, provided us with much more complete information. Had we not known that it was Ingeborg Bremmer, we would have said that here was buried a woman between 50 and 60 years of age, who probably suffered quite a bit of pain from cavities and other tooth problems. She was wearing a shirtwaist-type blouse and silk skirt with a silk and rayon belt and wore her hair in a bun either on top or on the back of her head. We know she died after 1895 because of the date on the casket handles and possibly after 1900. Although the latter date is the first known appearance of imitation tortoise-shell hairpins in the Sears, Roebuck catalogues (Joseph E. Randolph 1981:personal communication), items were not included in the catalogues until they had received wide public acceptance (Cohn 1940:xxix). Knowing the burial was that of Ingeborg Bremmer dating from 1910, however, we can say that she may well have been buried in the identical clothes and hairstyle she wore for her photograph in 1909 (Fig. 14).

Burial Customs

Until the early part of the twentieth century, American funerals traditionally took place in the home. Although undertaking parlors were beginning to be established toward the close of the nineteenth century, they were generally used only "for people who had no home of their own or had no friends or relatives who would offer the facilities of their quarters" (Habenstein and Lamers 1962:394). While funerals were sometimes held in the church, it was then more usual for the preacher to come to the home.

The prevailing atmosphere, while one of bereavement, allowed for considerable emotional release, in part due to the intimate involvement of family and friends with the customs and rituals associated with death. Lewis Atherton (1954:191-192) captures it very well when writing about community "togetherness" in Middle America:

> Death touched an entire community because virtually all knew the deceased... [It] called for many activities on the part of relatives and friends. The corpse must be washed and laid out, with its hair combed, and in its best suit or dress. A cabinet maker got busy on a casket, unless some furniture dealer carried ready-made stock. Friends began pouring in to the bereaved home as soon as the news reached them, and members of the family seated

> in the living room received their condolences. Each caller tiptoed into the parlor to see the corpse, as everyone was expected to perform that rite, and all commented on how natural and peaceful it looked. Cakes and pies and meats began to appear in the kitchen in profusion, the gifts of friends and neighbors... A spray of flowers or black ribbon on the front door and small groups of neighbors sitting at night in a dimly lighted room with the corpse signified that death prevailed within.

If the services of an undertaker were required, he may have been called upon to embalm the corpse, if burial were to be delayed. This would have been done in the home. He might also have helped in the selection of a coffin, although in more rural areas one could have been ordered from the local cabinet-maker or purchased, ready-made, at the furniture store. A ready-made coffin might need to be lined, or "trimmed," and the furniture dealer, with the help of his wife, might do this (Habenstein and Lamers 1962:402).

Mrs. Mary Bremmer Ketchum and Mrs. Hilda Bremmer McBain thought that the "caskets" for their mother and brother might have come from Kennewick, possibly even furnished by the Muller Funeral Home there, which began business about 1910 (Mary Rasmussen 1981:personal communication). The nearby and larger city of Pasco could also have provided them, in the manner described above; the Davis-Kaser Company sold "Undertakers' Supplies" as well as "Complete Home Furnishing" (*Pasco Express* 1908:[8]). The use of an outer wooden box to protect the interior coffin containing the body was preferred where possible.

There was always a large turnout for the funeral itself. As Habenstein and Lamers describe (1962:405-406), a long opening prayer might be followed by a reading of the 23rd Psalm and other relevant passages. Remarks by the minister contrasting the pain of earthly life with the glories of eternity preceded the eulogy. Hymns, such as "Thy Will Be Done," "Over the Stars There is Rest," and "Abide with Me" would be included where appropriate. Following completion of the service, lasting an hour or more, the mourners departed for "the final ordeal at the grave" (Atherton 1954:192).

Once the grave was filled by male friends and relatives the ritual was complete and the family could return home to pick up the pieces of their lives as best they were able, always remembering to take great care to follow the established conventions governing the standards of behavior for those who would respectfully mourn "the dear departed."

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